

## METHOD AND APPARATUS FOR SEMI-BLIND CHANNEL ESTIMATION

## ABSTRACT

5        In a multi-channel communication system (300) data (306) and pilot data (308)  
are combined to provide a composite signal comprising discrete data signals (405), each  
having a data portion (407) and a pilot data portion (409). The composite signal is  
transmitted and a corresponding composite signal received on a communication channel  
having varying characteristics. An added pilot semi-blind (APSB) channel estimator  
10    (320) and equalizer (330) apply a converging iterative process to estimate the  
characteristics of the communication channel and the transmitted data.

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